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Briefs

RISK PROFILING THROUGH A BEHAVIORAL FINANCE LENS

- Behavioral finance attempts to understand and explain actual investor behavior rather than theorize about investor behavior.
- In the behavioral context, tensions exist between the *willingness* to take risk (risk appetite) and the *ability* to take risk (risk capacity) as they are defined in terms of known and unknown risks.
- Advisers can use behavioral investor types to help make rapid yet insightful assessments of what type of investor they are dealing with before recommending an investment plan.
- With a better understanding of behavioral finance vis-à-vis risk taking, practitioners can enhance their understanding of client preferences and develop better-informed recommendations of investment strategies and products.

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CFA Institute
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RISK PROFILING THROUGH A BEHAVIORAL FINANCE LENS

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CFA Institute Research Foundation

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Risk Profiling through a Behavioral Finance Lens

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SUMMARY

In the first piece in this series, "Investor Risk Profiling: An Overview," Joachim Klement set forth the challenges that traditional risk tolerance questionnaires present to advisers and their clients. He showed that the current standard process of risk profiling through questionnaires is highly unreliable and typically explains less than 15% of the variation in risky assets between investors. Klement explained that the cause of these deficiencies is primarily the design of the questionnaires, which focus on socioeconomic variables and hypothetical scenarios to elicit the investor's behavior. In contrast, research in risk profiling has shown that several other factors can provide more accurate and reliable insight into the risk profiles of investors.

Among these factors are (1) the investor's lifetime financial experiences (including the most recent period's return and volatility of markets), (2) the investor's past financial decisions, and (3) the influence of family, friends, and advisers. An additional factor, which is the subject of this article, is the psychological temperament of the individual investor; thus, risk tolerance is viewed through a behavioral finance lens in the article. With a better understanding of behavioral finance vis-à-vis risk taking, practitioners can enhance their understanding of client preferences and better inform their recommendations of investment strategies and products.

INTRODUCTION

We have seen a powerful recovery in asset prices in the wake of the global financial crisis (GFC). Lest we forget, however, more than $15 trillion in asset values evaporated in 2008–2009, wiping out gains earned in the bull markets of the 1990s and early 2000s. Clients were shell shocked, often frozen like deer in the headlights as to what to do. And just as history has shown, markets are cyclical and another bear market will occur again—it is just a matter of time. When times are good, as they have been for the past seven years, our skills as financial professionals can get dull because we have not had to deal with panicky, stressed-out clients. But it is crucial to "stay on top of our game" and keep our skills sharp. That is what this article is all about—staying sharp and doing the best possible job for our clients by incorporating behavioral finance into our practice. I have been doing so for over 15 years, and it has paid large dividends for me.

Understanding how investors make investment decisions is no longer a "nice-to-have" skill. In this new era of volatile markets, financial advisers must be able to diagnose irrational behaviors and advise their clients accordingly. Do you have trouble believing that? Consider that many top advisers across the globe are already applying behavioral finance to their practice. A number of years ago, I surveyed 290 sophisticated financial advisers[1] in 30 countries to ask them about their interest in and use of behavioral finance with respect to their clients: 93% of advisers surveyed reported that they were aware of key behavioral finance biases, and 94% were using behavioral finance principles with their clients. Some less experienced and quantitatively oriented advisers, however, are needlessly struggling with understanding their clients' behavior. Assessing risk tolerance is not just the client's job; it is also the adviser's job to interpret behavior and make adjustments accordingly. This article provides information that you, as an adviser, can use to help clients through the tricky business of managing their behavior to maximize the chances of attaining their long-term financial goals.

BEHAVIORAL FINANCE

Behavioral finance attempts to understand and explain *actual* investor behavior, in contrast to theorizing about investor behavior. It differs from traditional (or standard) finance, which is based on assumptions of how investors and markets *should* behave. Behavioral finance is about understanding how people make decisions, both individually and collectively. By understanding how investors and markets behave, it may be possible to modify or adapt to these behaviors in order to improve economic outcomes.

In other words, the way investors think and feel affects the way they behave when making investment decisions. Some of these behaviors are unconsciously influenced by past experiences and personal beliefs to the extent that even intelligent investors can deviate from logic and reason. These influences, which can be categorized and identified as behavioral biases, can affect the way risk is perceived and how risk is interpreted by someone trying to understand a person's risk tolerance. Later in this piece, I provide a framework that connects behavioral finance and risk tolerance; but before I do, I am going to provide an

[1]In order to be "eligible" to receive a survey invitation, advisers needed to have some kind of advanced professional or academic designation—an MBA, the CPA credential, the CFA designation, the CFP certification, or other significant professional accomplishment.

overview of how I classify biases. This overview is very important because the characterization of each bias is critical to understanding *how* to deal with it in practice.

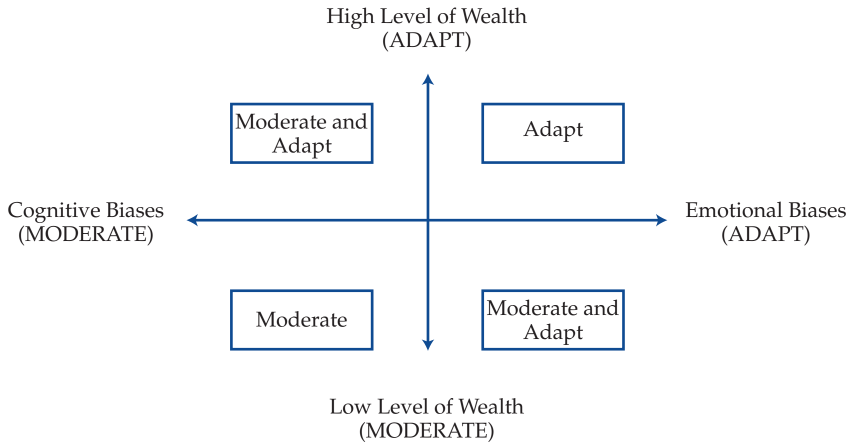
In the first edition of my book *Behavioral Finance and Wealth Management*, I introduced a way of categorizing biases. The broadest category breakdown of biases is *cognitive* and *emotional*. Cognitive biases have to do with how people *think*. Emotional biases have to do with how people *feel*. In other words, cognitive errors result from memory and information-processing errors—that is, faulty reasoning. In contrast, emotional biases are the result of reasoning that is influenced by feelings. This distinction is critical. There are two types of cognitive biases: *belief perseverance* and *information-processing biases*. Belief perseverance biases concern people who have a hard time modifying their beliefs even when faced with information to the contrary. It is a very human reaction to feel mentally uncomfortable when new information contradicts information you hold to be true. For example, for decades many people have been under the false impression that eating sugar produces hyperactivity in children. Twenty years ago, several studies examined the effects of sugar on children's behavior. An analysis of the results of all these studies was published in the 22 November 1995 issue of the *Journal of the American Medical Association.* The researchers concluded that sugar in the diet does not affect children's behavior, but a very large number of people continue to believe that it does—an example of belief perseverance. Related biases include cognitive dissonance, conservatism, confirmation, representativeness, illusion of control, and hindsight.

Information-processing biases concern people who make errors in their thinking when processing information related to a financial decision. The simplest example is anchoring, in which people tend to estimate on the basis of an initial default number. If I asked you to estimate the population of Canada and remarked that I did not know whether it was higher or lower than 30 million, you would probably "anchor" your estimate around that number and adjust from there rather than make an independent estimate. Information-processing biases include anchoring and adjustment, mental accounting, framing, availability, self-attribution, outcome, and recency.

Emotional biases are based on feelings rather than facts. Emotions often overpower our thinking during times of stress. All of us have likely made irrational decisions in the course of our lives. Emotional biases include loss aversion, overconfidence, self-control, status quo, endowment, regret aversion, and affinity.

The distinction between cognitive and emotional biases is very important when assessing risk tolerance. With emotional biases, advisers often need to *adapt* to these client behaviors. It is hard to change the way people feel. With cognitive biases, however, we advisers have an opportunity to modify or change our clients' thinking—that is, to *moderate* clients' behaviors. About 15 years ago, I created a simple framework for applying behavioral finance in practice. This concept of identifying the various types of biases and indicating how an adviser can help clients overcome these biases can help *you* solve many of the most vexing challenges of client relationship management. To complete the thought, I also included level of wealth in this original concept. When you combine the two concepts, you have the diagram in **Figure 1**.

FIGURE 1. TYPE OF BIAS AND LEVEL OF WEALTH



Later in the article, I connect these concepts to an overarching discussion about risk tolerance and how behavioral finance is inextricably linked to the risk tolerance discussion with clients. First, however, we need to define *risk*—not an easy thing to do, but the next section is a step in the right direction.

DEFINING RISK

Before we discuss assessing risk tolerance through a behavioral finance lens—which will involve looking at risk from the perspective of behavioral biases and ultimately investor types—we must first agree on what we mean by the term risk. Much has been written about the tension that exists between the *willingness* to take risk and the *ability* to take risk. For purposes of this article, *risk appetite* means the willingness to take risk and *risk capacity* means the ability to take risk. In the behavioral context, we need to further define risk appetite and risk capacity in terms of *known risks* and *unknown risks*. The reason is that, in general, when clients can at least understand and measure risks they are taking (i.e., *known* risks), they can accept the results. When the risks they believe they accepted include outcomes that are outside the bounds of what they expect or can reasonably understand (i.e., *unknown* risks), behavioral problems often begin. I delve into that subject in the next section; first, we need to further discuss the terms risk appetite and risk capacity.

Risk appetite is the amount of risk that one is willing to take in pursuit of reward. Risk appetite varies according to expected return; it may be expressed qualitatively and/or quantitatively. Investors with a high risk appetite focus on the potential for significant gains and are willing to accept higher possibility or severity of loss. Conversely, investors with a low risk appetite are risk averse and focus on stability and preservation of capital. Risk capacity can be thought of as the ability to absorb losses without having one's financial goals jeopardized.

The level of both risk appetite and risk capacity varies by individual; obviously, investors should not define their risk appetite without considering their risk capacity, but sometimes they do. In the end, risk capacity is the amount of risk a person can actually bear. On the one hand, an investor may have a high risk appetite but not have enough capacity to handle a risk's potential volatility or impact. On the other hand, risk capacity may be high but the investor, given his desire for risk reduction, may decide to adopt a lower risk appetite. Advisers can get a handle on these issues with their clients relatively easily when risks can be understood and measured—known risk. Risk has another dimension, however, that is not so easily measured and is often associated with irrational investor behavior—unknown risk. These two dimensions of risk are the subject of the next section.

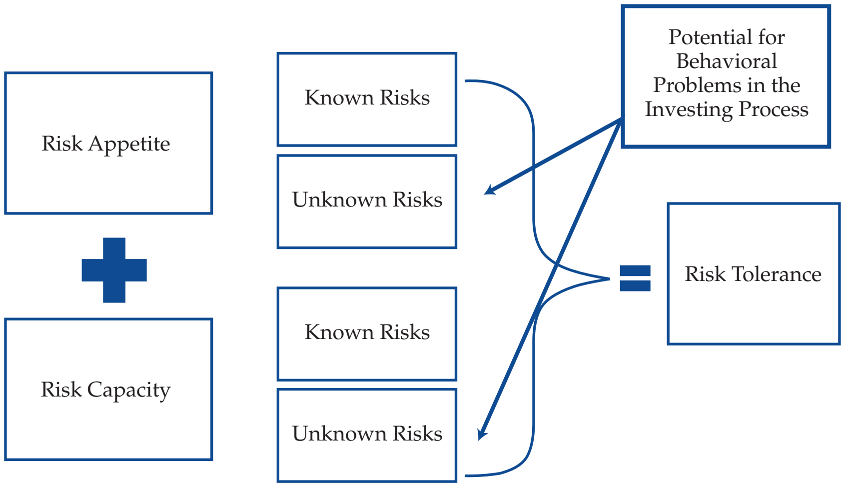
KNOWN AND UNKNOWN RISK

Beyond risk appetite and risk capacity lies another important frontier of risk that affects clients' behavior dramatically: known risk and unknown risk—that is, those risks that can be reasonably modeled and understood and those that cannot. One of my favorite quotes of all time is by Donald Rumsfeld, US secretary of defense under President George W. Bush, who said, "There are known knowns. These are things we know that we know. There are known unknowns. That is to say, there are things that we know we do not know. But there are also unknown unknowns. There are things we don't know we don't know."

Often, people communicate that they have a certain risk appetite and risk capacity. But do the adviser and the client agree on what is meant by *risk*? How much known risk and how much unknown risk can the client handle? Known risk is what we might call "normal risk"—risk we can comprehend easily and quantify using historical data from observations of financial markets. And then there is unknown risk, or "abnormal risk," that occurs once every 10 or 20 years and falls outside expectations. We can think of normal risk as one or two standard deviations from the normal. We can think of unknown risk as three or more standard deviations from the normal. Although severe bear markets and crashes occur from time to time, it is probably best to think of 2008–2009 as an unknown or abnormal risk. At that time, the actual portfolio return fell outside the expected range of most models based on a normal distribution of returns.

When a decision is made on how much risk to take (risk appetite) or a measurement is taken of how much loss can be tolerated without jeopardizing financial goals (risk capacity), unknown risk can cause investors to behave irrationally. People must consider their likely reaction to known risk, and especially unknown risk, to get a complete picture of their risk tolerance. Combining all these concepts, we arrive at the equation for risk tolerance shown in **Figure 2**. Although beyond the scope of this article, risk tolerance questionnaires should attempt to elicit responses that identify how much known and unknown risk an investor can bear in *both* categories—risk appetite and risk capacity.

FIGURE 2. EQUATION FOR RISK TOLERANCE



RISK TOLERANCE AND BEHAVIORAL FINANCE

Those of you who have taken the CFA exam recently or have read my books and articles over the years may be familiar with the concept of behavioral investor types (BITs). Identifying BITs through a process I developed called Behavioral Alpha® (BA) enhances the advisory process and allows advisers to work more effectively with their clients. Although I am unable to review the entire BA process in this piece, I do review key elements of the process relating to risk tolerance. The BA approach is a multi-step diagnostic process that classifies clients as one of four investor types. Bias identification, which is done near the end of the process after the assessment of risk tolerance, is narrowed down by giving the adviser clues as to which biases a client is likely to have based on the client's risk tolerance.

BITs were designed to help advisers make rapid yet insightful assessments of what type of investor they are dealing with before recommending an investment plan. The benefit of ascertaining investor type at the outset of a relationship is an adviser can mitigate client behavioral surprises that might otherwise dispose a client to change his or her portfolio as a result of market turmoil. If an adviser can limit the number of traumatic episodes that inevitably occur throughout the advisory process by delivering smoother (or closer-to-expected) investment results—because the adviser tailored an investment plan to the client's behavioral makeup—a stronger client relationship is the result. For purposes of this piece, each BIT is characterized by a certain risk tolerance level and a primary type of bias—either cognitive (driven by faulty reasoning) or emotional (driven by impulses and/or feelings).

One of the most important concepts advisers should keep in mind is that the least risk-tolerant investors and the most risk-tolerant investors are driven by *emotional* biases, whereas the two types in between these two extremes are mainly affected by *cognitive* biases. To more fully appreciate how this happens and why, you may want to read my book *Behavioral Finance and Investor Types*. The key advisory concept, however, is that emotional clients tend to be more difficult to work with. Advisers who can recognize the type of client they are dealing with prior to making investment recommendations will be much better prepared to deal with irrational behavior when it arises. **Exhibit 1** summarizes each BIT's characteristics and behavioral biases.

GUIDELINES FOR PRACTITIONERS

As discussed in the last section, the least risk-tolerant BIT clients and the most risk-tolerant BIT clients are *emotionally* biased in their behavior. In the middle of the risk scale are BITs who are affected mainly by *cognitive* biases. This dynamic should make intuitive sense. Emotion drives the behavior of clients who have a high need for security (i.e., a low risk tolerance); they get emotional about losing money and are uneasy during times of stress or change. Similarly, highly aggressive investors are also emotionally driven people, who typically suffer from a high level of overconfidence and mistakenly believe they can control the outcomes of their investments. In between these two extremes are the investors who suffer mainly from cognitive biases and can benefit

EXHIBIT 1. RISK TOLERANCE AND TYPES OF BIASES

	Conservative BIT	Moderate BIT	Growth BIT	Aggressive BIT
Risk tolerance	Low	Medium	High	Very high
Bias types	Primarily emotional	Primarily cognitive	Primarily cognitive	Primarily emotional
Biases	Endowment	Regret	Conservatism	Overconfidence
	Loss aversion	Hindsight	Availability	Self-control
	Status quo	Framing	Confirmation	Affinity
	Anchoring	Cognitive dissonance	Representativeness	Illusion of control
	Mental accounting	Recency	Self-attribution	Outcome

from education and information about their biases by making better investment decisions. With aggressive clients, the best approach is to deal with their biases head-on and discuss how their investment decisions will affect such emotional issues as family members, their legacy, and their standard of living.

Clients who are emotional about their investing need to be advised differently from those who make mainly cognitive errors. When advising emotionally driven investors, advisers need to focus on how an investment program can affect important emotional issues like financial security, retirement, and the impact on future generations rather than focusing on portfolio details like standard deviations and Sharpe ratios. A quantitative approach is more effective with clients who are less emotional and tend to make cognitive errors. The goal is to build better long-term relationships with clients; BITs are designed to help in this effort. In the following subsections, I review four basic investor types: *conservative, moderate, growth,* and *aggressive*. The review includes the biases that are likely to be present with each type of client and some thoughts on how to advise each type of client.

CONSERVATIVE INVESTORS

CONSERVATIVE INVESTORS

Risk tolerance level: Low

Behavioral bias orientation: Emotional

BIT description: Conservative investors (CIs) place great emphasis on financial security and preserving wealth. Many have gained wealth through inheritance or by not risking their capital to build wealth (e.g., by working in a large company). Because they tend to be risk averse, CIs may be worriers; they obsess over short-term performance and are slow to make investment decisions because they are uncomfortable with change and uncertainty. This behavior is consistent with their approach to their professional lives—they are careful not to take excessive risks. Many CIs focus on taking care of family members and future generations, especially by funding such life-enhancing experiences as education and homeownership.

The biases of CIs tend to be emotional—endowment bias, loss aversion, and status quo—but CIs also exhibit anchoring and mental accounting, both of which also have cognitive aspects.

Loss Aversion Bias

Bias type: Emotional

Conservative investors tend to feel the pain of losses more than the pleasure of gains compared with other client types. Thus, these clients may hold only losing investments too long, even when they see no prospect of a turnaround. Loss aversion is a very common bias and is seen by large numbers of financial advisers.

Status Quo Bias

Bias type: Emotional

Conservative investors often like to keep their investments (and other parts of their life, for that matter) the same—that is, they maintain the status quo. These investors tell themselves that "things have always been this way" and thus feel safe keeping things the same.

Endowment Bias

Bias type: Emotional

Conservative investors, especially those who inherit wealth, tend to assign a greater value to an investment they already own (such as a piece of real estate or an inherited stock position) than to one they neither possess nor have the potential to acquire.

Anchoring Bias

Bias type: Cognitive/Emotional

Conservative investors are often influenced by purchase points or arbitrary price levels and tend to cling to such numbers when facing questions like, "Should I buy or sell this investment?" Suppose that the stock falls to $75 a share from a high of $100 five months ago. Frequently, a conservative client will resist selling until the price rebounds to at least $100/share.

Mental Accounting Bias

Bias type: Emotional/Cognitive

Conservative clients often treat various sums of money differently on the basis of where the sums are mentally categorized. For example, these investors segregate their assets into safe and risky "buckets." Although this behavior is usually not harmful, returns will almost certainly be suboptimal if all the assets are viewed as safe money.

Advice for Conservative Investors

After reviewing this subsection, readers might correctly conclude that CIs are difficult to advise because they are driven mainly by emotion. Although this conclusion is true, CIs are also greatly in need of good financial advice. Advisers should take the time to interpret the behavioral signs provided by CI clients. CIs need "big-picture" advice, and advisers should not dwell on such details as standard deviations and Sharpe ratios or else they will lose the client's attention. CIs need to understand how the portfolio they choose to create will deliver the desired results concerning such emotional issues as family members and future generations. Once they feel comfortable discussing these important emotional issues with their adviser and a bond of trust is established, they will take action. After a while, CIs are likely to become an adviser's best clients because they value greatly the adviser's professionalism, expertise, and objectivity in helping make the right investment decisions. In addition, CIs can usually benefit from the added risk that a competent adviser persuades them to take so long as the adviser carefully monitors the risk and does not allow it to become too large.

MODERATE INVESTORS

MODERATE INVESTORS

Risk tolerance level: Moderate

Behavioral bias orientation: Cognitive

BIT description: Moderate investors (MIs) often do not have their own ideas about investing but instead follow the lead of their friends and colleagues in making investment decisions. They are comfortable with being invested in the latest, most popular investments, often without regard to a long-term plan. One of the key challenges of working with MIs is that they often overestimate their risk tolerance. Advisers need to be careful not to suggest too many "hot" investment ideas—MIs will likely want to do all of them. Some do not like, or even fear, the task of investing, and many put off making investment decisions without professional advice; the result is that they maintain, often by default, high cash balances. MIs generally comply with professional advice when they get it, but they can sometimes be difficult because they do not enjoy, or have no aptitude for, the investment process.

The behavioral biases of MIs are mostly cognitive: recency, hindsight, regret aversion, framing, and cognitive dissonance.

Recency Bias

Bias type: Cognitive

Recency bias is a predisposition to recall and emphasize recent events and/or observations and to extrapolate patterns where none exist. Recency bias ran rampant during the bull market of 2003–2007, when many investors wrongly presumed that the stock market—particularly energy, housing, and international stocks—would continue to gain indefinitely. A similar mentality is emerging now that the more recent bull market of 2009–2015 has become entrenched in some investors' minds. Moderate investors may invest when prices are peaking, materially hurting long-term returns.

Hindsight Bias

Bias type: Cognitive

Moderate clients may be susceptible to hindsight bias, which occurs when an investor perceives past investment outcomes as if they had been predictable. An example of hindsight bias is the response by investors to the financial crisis of 2008. Initially, many viewed the housing market's performance from 2003 to 2007 as "normal" (i.e., not symptomatic of a bubble), only later saying, "Wasn't it obvious?" when the market had a meltdown in 2008. Hindsight bias gives investors a false sense of security when making investment decisions, emboldening them to take excessive risk without recognizing it as such.

Framing Bias

Bias type: Cognitive

Framing bias is the tendency of investors to respond to situations differently on the basis of the context in which a choice is presented (framed). The use of risk tolerance questionnaires provides a good example. Depending on how questions are asked, framing bias can cause investors to respond to risk tolerance questions in either an unduly risk-averse or an unduly risk-taking manner. For instance, when questions are worded in the "gain frame" (e.g., suppose an investment goes up), a risk-taking response is more likely. When questions are worded in the "loss frame" (e.g., suppose an investment goes down), risk-averse behavior is the likely response.

Cognitive Dissonance Bias

Bias type: Cognitive

In psychology, cognitions represent attitudes, emotions, beliefs, or values. When multiple cognitions intersect—for example, a person believes something is true only to find out it is not—people try to alleviate their discomfort by ignoring the truth and/or rationalizing their decisions. Investors who suffer from this bias may continue to invest in a security or fund they already own after it has gone down (i.e., they double down), even when they know they should be judging the new purchase objectively and independently of the existing holding. A common phrase for this concept is "throwing good money after bad."

Regret Aversion Bias

Bias type: Emotional

Moderate investors often avoid taking decisive actions because they fear that, in hindsight, whatever course they select will prove unwise. Regret aversion can cause moderate investors to be too timid in their investment choices because of losses they have suffered in the past.

Advice for Moderate Investors

Clients with the biases of MIs need to recognize that they tend to follow the lead of others and may not have their own ideas about investing. Not fully grasping their own risk tolerance, they may simply plow ahead with the task of investing. When an investment goes their way, they may convince themselves that they "knew it all along," a view that also increases future risk-taking behavior. Advisers need to handle MIs with care because they are likely to say yes to investment ideas that make sense to them regardless of whether the advice is in their best long-term interest. Advisers need to lead MIs to take a hard look at behavioral tendencies that may cause them to overestimate their risk tolerance. Because MI biases are mainly cognitive, educating MI clients on the benefits of portfolio diversification and sticking to a long-term plan is usually the best course of action. Advisers should challenge MI clients to be introspective and should provide data-backed substantiation for their recommendations. Offering information to MI clients in clear, unambiguous ways so they have the chance to "get it" is a good idea. If advisers take the time, this steady, educational approach will generate client loyalty and adherence to long-term investment plans.

GROWTH INVESTORS

GROWTH INVESTORS

Risk tolerance: Medium to high

Behavioral bias orientation: Cognitive

BIT description: Growth investors (GIs) are active investors with medium to high risk tolerance; some are strong-willed and independent thinkers. GIs are often self-assured and "trust their gut" when making decisions; when they do their own research, however, they may not be thorough enough with due diligence tasks. GIs sometimes make investments without consulting anyone. This behavior can be problematic because, owing to their independent mindsets, these clients maintain their views even when those views are no longer supportable (e.g., because of changed market conditions). GIs often enjoy investing and are comfortable taking risks, but they may resist following a financial plan. Of all the behavioral investor types, GIs are the most likely to be contrarian, which can sometimes benefit them. Some GIs are obsessed with trying to beat the market and may hold concentrated portfolios.

The behavioral biases of GIs are cognitive: conservatism, availability, confirmation, representativeness, and self-attribution.

Conservatism Bias

Bias type: Cognitive

Conservatism bias occurs when people cling to a prior view or forecast at the expense of acknowledging new information. GIs often exhibit this behavior. For example, assume that an investor purchases a security on the basis of knowledge about a forthcoming new-product announcement. The company then announces that it is experiencing problems bringing the product to market. GIs may cling to the initial, optimistic impression of the new-product announcement and fail to take action on the negative announcement.

Availability Bias

Bias type: Cognitive

Availability bias occurs when people estimate the probability of an outcome on the basis of how prevalent that outcome appears to be in their lives. People who exhibit this bias perceive easily recalled possibilities as being more likely than those prospects that are harder to imagine or difficult to comprehend. For example, suppose that GI investors are asked to identify the "best" mutual funds. Many of them would perform a Google search and, most likely, find funds from firms that engage in heavy advertising. Investors subject to availability bias are thus influenced to pick funds from such companies, despite the fact that some of the best-performing funds advertise very little, if at all (they do not need to).

Representativeness Bias

Bias type: Cognitive

Representativeness bias occurs as a result of a flawed perceptual framework when processing new information. To make new information easier to process, some investors project outcomes that resonate with their own pre-existing ideas. For example, a GI might view a particular stock as a value stock because it resembles an earlier value stock that was a successful investment, but the new investment is *not* a value stock. Suppose that a high-flying biotech stock with scant earnings or assets drops 25% after a negative product announcement. Some GIs might take this situation to be representative of a "value" stock because the stock is cheap. But biotech stocks do not typically have earnings, whereas traditional value stocks have had earnings in the past but are temporarily underperforming.

Self-Attribution (Self-Enhancing) Bias

Bias type: Cognitive

Self-attribution bias (or self-enhancing bias) refers to the tendency of people to ascribe their successes to their own innate talents and to blame failures on outside influences. For example, suppose that a GI invests in a particular stock that goes up in price. The investor believes it went up not because of such external factors as economic conditions or competitor failures (the most likely reasons for the price rise) but, rather, because of the GI's investment savvy. This behavior is classic self-enhancing bias.

Confirmation Bias

Bias type: Cognitive

Confirmation bias occurs when people observe, overvalue, or actively seek information that confirms their claims while ignoring or devaluing evidence that discounts their claims. Confirmation bias can cause investors to seek only information that confirms their beliefs about an investment and not to seek information that contradicts their beliefs. This behavior can leave investors in the dark regarding, for example, the imminent decline of a stock. GIs are often subject to this bias.

Advice for Growth Investors

GIs can be difficult clients to advise owing to their independent mindsets, but they are usually grounded enough to listen to sound advice when it is presented in a way that respects their independent views. As we have learned, GIs firmly believe in themselves and their decisions but can be blind to contrary thinking. As with MIs, education is essential to changing the behavior of GIs, whose biases are predominantly cognitive. A good approach is to have regular educational discussions during client meetings, in which the adviser does not point out unique or recent failures but, rather, educates clients and incorporates concepts that are appropriate for them. Because GI biases are mainly cognitive, educating GIs on the benefits of portfolio diversification and sticking to a long-term plan is usually the best course of action. Advisers should challenge GIs to reflect on how they make investment decisions and should provide data-backed substantiation for their recommendations. Offering information in clear, unambiguous ways is an effective approach. If advisers take the time, this steady, educational method should yield positive results.

AGGRESSIVE INVESTORS

AGGRESSIVE INVESTORS

Risk tolerance: High

Behavioral bias orientation: Emotional

BIT description: Aggressive investors (AIs) are the most aggressive BIT. These entrepreneurial clients are often the first generation in their family to create wealth. They are even more strong willed and confident than GIs. Very wealthy AIs have often been in control of the outcomes of their business activities and believe they can do the same with investing—they are overconfident. AIs often like to change their portfolios as market conditions change, which often creates a drag on investment performance. AIs are quick decision makers; they may chase higher-risk investments that their friends or associates are investing in. Some AIs do not believe in such basic investment principles as diversification and asset allocation; they are often “hands-on” and want to be involved in the investment decision making.

The behavioral biases of AIs are overconfidence, self-control, affinity, outcome, and illusion of control.

Overconfidence Bias

Bias type: Emotional (with cognitive aspects)

Overconfidence is best described as unwarranted faith in one’s own thoughts and abilities—which contains both cognitive and emotional elements. Overconfidence manifests itself in investors’ overestimation of the quality of their judgment. Many aggressive investors claim an above-average aptitude for selecting stocks; however, numerous studies have shown this claim to be a fallacy almost always. For example, a study done by researchers Odean and Barber[2] showed that after trading costs (but before taxes), the average investor underperformed the market by approximately 2% a year owing to the investor’s unwarranted belief in his ability to assess the correct value of investment securities.

[2]Brad M. Barber and Terrance Odean, “Trading Is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors,” *Journal of Finance*, vol. 55, no. 2 (April 2000): 773–806.

Self-Control Bias

Bias type: Emotional

Self-control bias is the tendency to consume today at the expense of saving for tomorrow. The primary concern for advisers is a client with high risk tolerance coupled with high spending. For example, suppose that you have an aggressive client who prefers aggressive investments and has high current spending needs—and suddenly the financial markets hit severe turbulence. To meet current expenses, the client may be forced to sell solid long-term investments that have been priced down owing to current market conditions.

Affinity Bias

Bias type: Emotional

Affinity bias, another emotional bias, refers to investors' tendency to make irrationally uneconomical consumer choices or investment decisions on the basis of how they believe a certain product or service will reflect their values. AIs are often subject to this bias.

Outcome Bias

Bias type: Cognitive

This bias occurs when investors focus on the outcome of a process rather than on the process used to attain the outcome. In the investment realm, this behavior consists of focusing on a return outcome without regard to the process used (i.e., the risk taken) to achieve the return. It is important for clients to understand how the outcome was achieved, not simply the outcome itself.

Illusion of Control Bias

Bias type: Cognitive

The illusion of control bias occurs when people believe that they can control or at least influence investment outcomes when, in fact, they cannot. Aggressive investors who are subject to this bias believe that the best way to manage an investment portfolio is to constantly adjust it. For example, trading-oriented investors, who accept high levels of risk, believe that they possess more control over the outcomes of their investments than they actually do because they are "pulling the trigger" on each decision.

Advice for Aggressive Investors

Aggressive investors are the most difficult clients to advise, particularly if they have experienced losses. Because they like to control, or at least get deeply involved in, the details of investment decision making, they tend to eschew advice that might keep their risk tolerance in check. And they are excited and optimistic that their investments will do well, even if that optimism is irrational. Some ACs need to be monitored for excessive spending, which, if out of control, can inhibit the performance of a long-term portfolio through withdrawals at inopportune times. In my view, the best approach to dealing with these clients is to *take control* of the situation. Advisers who let an aggressive client dictate the terms of the advisory engagement will always be at the mercy of the client's irrational decision making, and the result will likely be an unhappy client and an unhappy adviser. Advisers need to prove to the client that they can make great, objective, long-term decisions and that they can effectively communicate the results. Advisers who demonstrate the ability to take control of a situation will see their aggressive, emotionally charged clients fall into step and be better clients who are easier to advise.

CONCLUSION

In this piece, I have viewed risk tolerance through a behavioral finance lens while giving advisers some practical steps to follow when working with behaviorally biased clients who fall within the risk tolerance spectrum. There are two key takeaways:

- When viewing risk tolerance from a behavioral finance perspective, try to identify how your clients will react not only to known risks but also to unknown risks; unknown risks that come to pass are often the source of behavioral issues that can derail an investment plan.

- When advising clients, it is essential to distinguish between the various types of biases you encounter. If you are dealing with emotional biases, your advice should be tailored to that type of behavior; if you are dealing with cognitive biases, your advice should reflect that situation.

In an overarching sense, I suggest that you try to discuss these issues with your clients as often as possible. I know it is not always easy to discuss psychological issues during the investment process, but if you are successful, you will have very satisfied, long-term clients.

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